

NOTES ON A NEW SPECIES OF *EUCALYPTUS**(E. MAIDENI)* FROM SOUTHERN NEW SOUTH WALES.

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(Plates XXVIII. and XXIX.).

Finally tall; branchlets slender, quadrangular at the end; leaves scattered, of rather thick consistence, copiously dotted, narrow-elongate or sometimes broad-lanceolar, distinctly or somewhat sickle-shaped; the petioles from $\frac{1}{2}$ to 1 inch in length, the lateral veins spreading and slightly prominent underneath, the circumferential vein distinct and rather remote from the edge of the leaf; young shoots quadrangular, their leaves broadly cordate with a small pointed apex, opposite and of a whitish hue underneath, petioles almost absent; umbels axillary, on angular stalks about $\frac{1}{2}$ inch long, dilated towards the top, bearing 2 to 9 flowers of rather large size, stalklets none or exceedingly short; calyx-tube obconical, angular, warty-glandular, especially at the base; lid depressed hemispherical, suddenly raised in the centre to a thick point, like the calyx-tube warty-glandular; stamens all fertile, inflexed before expansion; anthers oblong kidneyshaped; stigma slightly broader than the style, depressed; ovulary 3- to 5-celled; fruit $\frac{1}{4}$ inch in thickness, nearly hemispherical, its rim broad, convex, at the edge separated from the calyx-tube by an ample furrow; seeds all without any appendage, the sterile narrower and longer than the fertile seeds.

In rich soil only on steep mountain-slopes from the southern boundary as far north as the Braidwood and Nelligen districts (W. Bäuerlen).

A tree, locally known as White, Blue or Spotted Gum; in favourable situations attaining a height of 200 feet and a diameter of 4 feet. Stem usually very straight, and much elongated. Bark smooth and usually bluish or greyish, sometimes with long drawn patches or spots, sometimes rather white, at other times of a dull ochre-yellow colour. In general appearance the tree and bark resemble a good deal that of *Euc. goniocalyx*, so much so that on mountain-slopes, where both species promiscuously occur, it is difficult to distinguish the one from the other, when so situated, that the fruit on the ground is so mixed, that it can not be traced with certainty to its particular tree. If however leaves of the young state can be seen, then the distinction is easy enough, as those of *Euc. goniocalyx* are never quite so broad nor of such chalk-like whiteness. Where the fruit can be traced, no mistake can be made, as they are so widely different, and resemble more those of *E. globulus*.

It has very little kino, and from that fact one would judge, that it is a good timber. Somehow or other it is not much used, which is, no doubt, to a certain extent owing to its situation, mostly difficult of access, and also to the fact, that in situations where it occurs, other valuable and time-proved timbers do occur, such as *E. tereticornis*, *E. hemiphloia*, *E. goniocalyx*, *E. melliadora*, *E. eugenioides*, etc. The timber is, however, used for fencing, both for rails and posts, also for rough building purposes and to a certain extent for wheelwright work. As posts, it is said, it lasts fairly well, and it makes excellent rails. The timber is *very heavy*, hard and of a rather pleasing yellow colour, not somewhat brownish as that of *E. goniocalyx*.

EXPLANATION OF PLATES.

(PLATE XXVIII.)

Fig. 1.—Twig with expanded flowers, buds, leaves and fruits.
(Nat. size.)

Fig. 2.—Calyx-tube with lid uplifted.

PLATE XXVIII.—*continued* :

Fig. 3.—Longitudinal section of an unopened flower.

Fig. 4.—Transverse section of ovulary.

Fig. 5.—Flower, expanded.

Fig. 6.—Anthers with filaments.

Fig. 7.—Transverse section of fruit.

Fig. 8.—Sterile seeds.

Fig. 9.—Fertile seeds.

(Figs 2-9 enlarged.)

(PLATE XXIX.)

Fig. 1.—Leaf of adult tree. (Nat. size.)

Fig. 2.—Young shoot with leaves. (Nat. size.)

Fig. 3.—Part of leaf showing venules and oildots. (Enlarged.)